



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/883,322	06/26/1997	RYOICHI SHIMIZU	SONYP7510	5057

7590 12/31/2001

William E Vaughan  
Bell Boyd & Lloyd LLC  
P O Box 1135  
Chicago, IL 60690-1135

EXAMINER

TRAN, THAI Q

ART UNIT	PAPER NUMBER
----------	--------------

2615

DATE MAILED: 12/31/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
08/883,322

Applicant(s)

Shimizu

Examiner

Thai Tran

Art Unit

2615



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 19, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Art Unit: 2615

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 9/10/2002
3. Claims 1-~~13~~<sup>14</sup> are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki ('858) in view of Okauchi ('890) as set forth in paragraph #3 of the last Office Action.

Regarding claim 1, Suzuki discloses an a video tape recorder (Fig. 5 and Fig. 17) capable of performing signal recording and reproducing process at a plurality of different frame rates having means (column 7, lines 9-42 and column 17, lines 6-9) for recording an input image signal at a selected recording frame rate. However, Suzuki does not specifically discloses means for recording a first time code stepped in a non-drop frame format and a second time code stepped in a drop frame format together with the selected recording frame rate.

Art Unit: 2615

Okauchi teaches a data recording system for use in a video tape recorder having means (column 5, lines 8-66) for recording a first time code stepped in a non-drop frame format and a second time code stepped in a drop frame format together with the selected recording frame rate so that the time code in recording is coincidence with the real time according to the CTL coding system.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the time code recorder as taught by Okauchi into Suzuki's system in order to coincide the real time and the time code in recording according to the CTL coding system.

Regarding claim 2, the combination of Suzuki and Okauchi teaches that the input image signal is recorded as a component digital image signal on a recording medium (column 11, lines 4-57 of Suzuki), and the time code stepped in the non-drop frame format, the time code stepped in the drop frame format, and the recording frame rate are each respectively recorded in an auxiliary area of the signal recording area on the recording medium (column 5, lines 8-66 of Okauchi and column 11, lines 40-48 of Suzuki).

Regarding claim 3, Suzuki discloses that the signal recording area of the recording medium is a video recording area (column 14, lines 30-45).

Regarding claim 4, Suzuki discloses that the signal recording area of the recording medium is a audio recording area (column 14, lines 30-45).

Art Unit: 2615

Regarding claim 5, the claimed 59.94 Hz is met by the NTSC signal disclosed in column 7, lines 30-42) and the claimed 60 Hz is met by the MUSE signal disclosed in column 7, lines 9-16 and column 17, lines 6-9 of Suzuki.

Regarding claim 6, the claimed a frame rate selection circuit for selecting a frame rate from the plurality of frame rates is met by the switch 8 of Suzuki (column 8, line 64 to column 9, line 31 of Suzuki); the claimed a counting method selection circuit for selecting a time code counting method from a plurality of time code counting methods is met by column 5, lines 8-62 of Okauchi; the claimed a first signal generation circuit for outputting a first control signal indicating the selected frame rate is met by switch 8 of Suzuki (column 8, line 64 to column 9, line 31 of Suzuki); the claimed a second signal generation circuit for outputting a second controlling signal indicating the selected time code is met by column 5, lines 8-62 of Okauchi; the claimed a time code generator circuit for generating a plurality of time code counts, one for each of the plurality of time code counting methods is met by column 5, lines 8-62 of Okauchi; the claimed a first recording circuit for recording the video signals on the recording medium at the selected frame rate in response to the first controlling signal from the control circuit is met by magnetic heads 1A, 1B, 2A and 2B of Fig. 5 of Suzuki; the claimed a second recording circuit for recording the plurality of time code counts from the time code generator circuit on the recording medium is met by the magnetic head 8 of Fig. 2 of Okauchi; the claimed a third recording circuit for recording data indicating the selected frame rate on the recording medium is met by column 11, lines 40-48 of Suzuki; and wherein a time code method selection and recording circuit for selecting a time

Art Unit: 2615

code count from the plurality of time code counts generated by the time code generator circuit, and for recording the selected time code count on the recording medium in response to the second controlling signal from the control circuit is met by column 5, lines 8-66 of Okauchi.

Claim 7 is rejected for the same reasons as discussed in claim 5 above.

Regarding claim 8, the claimed wherein the plurality of time code counting methods include a first time code counting method of the video signal using drop frame stepping and a second time code counting method of the video signal using non-drop frame stepping is met by column 5, lines 8-66 of Okauchi.

Claim 9 is rejected for the same reasons as discussed in claim 2 above.

Claim 10 is rejected for the same reasons as discussed in claim 3 above.

Claim 11 is rejected for the same reasons as discussed in claim 4 above.

Claim 12 is rejected for the same reasons as discussed in claims 1 and 6 above and the additional claimed recording medium processing means for recording the audio and video signal on the recording medium as the selected frame rate based on the first control signal is met by column 14, lines 30-45 of Suzuki and the claimed time code reproducing means for reproducing the selected time code count recorded on the recording medium is met by column 5, line 64 to column 6, line 11 of Okauchi.

Regarding claim 13, Suzuki discloses a video tape recording method for performing signal recording and reproducing processes at a plurality of frame rates (Fig. 5 and Fig. 17) having the steps of separating the time code information and recording frame rate information according to a

Art Unit: 2615

reproduced signal (TCI discriminators 50 and 51 of Fig. 17 and column 24, lines 30-55) and selecting a playback frame rate for the reproduced signal and a time code for the selected frame rate (column 18, lines 63-67 and column 24, lines 30-55). However, Suzuki does not specifically disclose a plurality of types of time code information and the claimed reproduced image information is accessed via real-time units and frame number units.

Okauchi teaches a data recording/reproducing system for use in a video tape recorder having means (column 5, lines 8-66 and column 5, line 63 to column 6, line 21) for recording/reproducing a first time code stepped in a non-drop frame format and a second time code stepped in a drop frame format together with the selected recording frame rate so that the time code in recording is coincidence with the real time according to the CTL coding system and that the video signal is reproduced via real-time units and frame number units (column 1, lines 6-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the time code recorder/reproducer as taught by Okauchi into Suzuki's system in order to coincide the real time and the time code in recording according to the CTL coding system.

The method claim 14 is rejected for the same reasons as discussed in apparatus claims 1 and 6 above.

***Response to Arguments***

Art Unit: 2615

4. Applicant's arguments filed Oct. 19, 2001 have been fully considered but they are not persuasive.

In re pages 1-3, applicant argues that Susuki or Okauchi does not teach or suggest the claimed "means for recording a first time code stepped in a non-drop-frame format and a second time code stepped in a dropped-frame format together with the selected recording frame rate" as recited in claim 1; "a second recording circuit for recording the plurality of time code counts from the time code generator circuit on the recording medium" and "a time code method selection and recording circuit for selecting a time code count from the plurality of time code counts generated by the time code generator circuit, and for recording the selected time code count on the recording medium in response to the second controlling signal from the control circuit" as recited in claim 6; "means for recording both the first time code count and the second time code count from the time code generating means on the recording medium" as well as "a time code selection means for selecting a time code counting method from among the first time code counting method and the second time code counting method based on the second control signal from the control means" as recited in claim 12; and "recording the plurality of time code counts on the recording medium" as recited in claim 14 because Okauchi only records only type of time-code pulses on the tape: either drop-frame coded pulses or non-drop frame coded pulses and nowhere does Okauchi et al disclose recording both drop-frame and non-drop frame pulses on the tape.

In response, the examiner respectfully disagrees. Okauchi discloses in col. 3, lines 4-60 that "A data recording system for use in VTRs according to a first embodiment ... **In the case of**

Art Unit: 2615

NTSC, since the accurate frame number is 29.97 frame per second, the frame number due to counting the CTL pulses deviates with respect to the real time. This deviation results in 108 frames (3.6 seconds) per hour and hence provides an important problem if working for a long time. The correction of this deviation can be effected with 108 bits being reduced from the number of the dummy bits per hour ( $10 \text{ bits} \times 60 \times 60 / 2 = 18000$ ). More specifically, the number of the dummy bits in the time code having the data representing every minute on the minute (00 second) except for every 10 minutes (e.e., 0, 10, 20, 30, 40 and 50 minutes) is reduced by 2 bits so as to become 8 bits, that is,  $(60-2) \times 2 \text{ bits} = 108 \text{ bits}$ ...Of these 8 or 10 dummy bits, the initial bit is for distinguishing between a correction mode or a non-correction mode. When the initial bit is "0", the non-correction mode (non-drop frame mode) is taken so as not to perform the time deviation correction. When the initial bit is "1", the correction mode (drop frame mode) is performed so that the number of the dummy bits is determined to be 8 (including the initial bit) at every minute on the 20 minute (00 second) except for every 10 minutes (0, 10, 20, 30, 40 and 50 minutes)... From the above passage, it is clear that, for the selected frame rate (NTSC, 29.97 frame per second), two types of time codes (non-drop frame mode, 10 dummy bits, and drop frame mode, 8 dummy bits) are recorded along with the selected frame rate on the video tape.

Even if, arguendo, that col. 3, lines 4-60 of Okauchi does not disclose the capability of recording both drop-frame and non-drop-frame coded pulses along with the selected recording frame rate, the user can operate the manual switch disclosed in col. 5, lines 9-14 of Okauchi to

Art Unit: 2615

record both drop-frame and non-drop frame coded pulses together with the selected recording frame rate.

Since Okauchi discloses the claimed capability of recording both drop-frame and non-drop frame coded pulses together with the selected recording frame rate on the video tape, the claimed “means for recording a first time code stepped in a non-drop-frame format and a second time code stepped in a dropped-frame format together with the selected recording frame rate” as recited in claim 1; “a second recording circuit for recording the plurality of time code counts from the time code generator circuit on the recording medium” and “a time code method selection and recording circuit for selecting a time code count from the plurality of time code counts generated by the time code generator circuit, and for recording the selected time code count on the recording medium in response to the second controlling signal from the control circuit” as recited in claim 6; “means for recording both the first time code count and the second time code count from the time code generating means on the recording medium” as well as “a time code selection means for selecting a time code counting method from among the first time code counting method and the second time code counting method based on the second control signal from the control means” as recited in claim 12; and “recording the plurality of time code counts on the recording medium” as recited in claim 14 are taught or suggested in col. 5, lines 8-66 of Okauchi.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2615

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

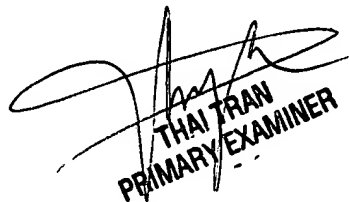
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. To Friday, 8:00AM to 5:30 PM.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TTQ

December 30, 2001

  
THAI TRAN  
PRIMARY EXAMINER